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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,128	09/22/2003	Michael E. Thomas	H0003933-US	5400
21567	7590	08/27/2004	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			SHEEHAN, JOHN P	
			ART UNIT	PAPER NUMBER
			1742	
DATE MAILED: 08/27/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/665,128	Applicant(s) THOMAS ET AL.	
	Examiner John P. Sheehan	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-27 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Claim 1 is generic to a plurality of disclosed patentably distinct species comprising:

I. Lithium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

II. Sodium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

III. Potassium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium,

molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

IV. Rubidium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

V. Cesium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

VI. Francium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

VII. Vanadium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one

element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

VIII. Niobium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

IX. Tantalum based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

X. Chromium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

XI. Molybdenum based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

XII. Tungsten based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

XIII. Iron based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

IXV. Ruthenium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum,

chromium, molybdenum, tungsten, iron, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

XV. Osmium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, cobalt, rhodium, iridium, nickel, palladium and platinum.

XVI. Cobalt based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, rhodium, iridium, nickel, palladium and platinum.

XVII. Rhodium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, iridium, nickel, palladium and platinum.

XVIII. Iridium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one

element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, nickel, palladium and platinum.

IXX. Nickel based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, palladium and platinum.

XX. Palladium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, and platinum.

XXI. Platinum based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel and palladium.

XXII. Alloys containing no base metal, that is, alloys wherein there is no single metal over 50 weight percent and comprising at least 2 elements selected from the group consisting of Lithium based alloys containing at least one element selected from the groups 1, 5, 6, 8, 9 and 10 of the periodic table that at least one element selected from the group consisting of hydrogen, lithium, sodium, potassium, rubidium, cesium, francium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed, see MPEP 803.02 and 809.02(d).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

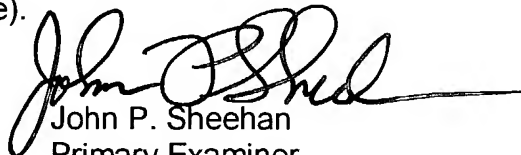
or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742